

largest and plumpest propagula and most reduced leaf-blades. Even the abortive lateral shoots from the leaf-axils may bear minute leaves and saccate gemmiparous petioles.

Superposed buds evidently are produced at the nodes, for the production of a vegetative shoot in a leaf axil does not result in an empty petiolar sac. In almost all instances when a vegetative shoot diverges from a leaf axil, another, situated slightly below, grows into the petiolar sac, filling it with a propagular shoot.

R. K. Vickery (in litt.) feels that the relationships of the new species are with *M. guttatus* DC. although the shape of the corolla, with its very weakly-developed palate, more closely resembles that of *M. glabratus* H.B.K.

*Mimulus gemmiparus* has been known in the field and herbarium for over twenty years. It was first discovered by Ruth Ashton Nelson on the North Inlet Trail on the west side of the Continental Divide (Grand County). She experimented with the propagula and was able to germinate them. Some years later, Mrs. Margaret Douglass became interested in the plant during her surveys of the vegetation of the Park. She forwarded living material to R. K. Vickery, who analyzed it cytologically. Although a great deal of field work has been done in the mountains of Colorado, this unique species has not yet been found outside Rocky Mountain National Park.

Flowers are very infrequently produced in *Mimulus gemmiparus* and the calyces that have been found lack mature capsules. Reproduction seems to be almost exclusively the function of the vegetative propagulum.

#### LITERATURE CITED

GRANT, A. L. 1924. A monograph of the genus *Mimulus*. *Annals Missouri Bot. Garden* 11: 99-388.

#### NOTES AND NEWS

AVAILABILITY OF SMILEY'S BOREAL FLORA OF THE SIERRA NEVADA.—A limited number of "A report upon the boreal flora of the Sierra Nevada of California" (Frank Jasn Smiley, 1921. *Univ. Calif. Publ. Bot.* 9:1-423.) were recently uncovered from storage at Occidental College. Individuals interested in obtaining a copy for their institutional or herbarium library should address their request to Dieter Wilkin, Department of Biology, Occidental College, Los Angeles, California 90041.

#### NEW PUBLICATIONS

Systematics of the Onocleoid ferns. By ROBERT M. LLOYD. *Univ. Calif. Publ. Bot.* 61:1-86. 1971. A monographic study of *Onoclea*, *Matteucia*, and the monotypic Mexican-Guatemalan *Onocleopsis hintonii*.

A biosystematic study of the genus *Brodiaea* (Amaryllidaceae). By THEODORE F. NIEHAUS. *Univ. Calif. Publ. Bot.* 60:1-66. 1971. A comprehensive study of *brodiaea*, *sensu stricto*.